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(See President's Message on page 1)

THE ILLINOIS ENGINEER, APRIL, 1952—VOLUME XXVIII, NO. 4

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Of Professional Interest

I hold every man a debtor to his profession; from the which as men of course do seek to receive countenance and profit, so ought they of duty to endeavor themselves by way of amends to be a help and ornament thereunto.

Sir Francis Bacon

THE ILLINOIS ENGINEER—THIS MONTH

The ILLINOIS ENGINEER has the privilege this month of publishing a very thought provoking paper by Mr. C. G. A. Rosen. Basically, the engineer is not concerned with sociological or political problems even though his work does have important implications in those directions. It is a matter of indifference to him, as far as the actual conduct of his work is concerned, whether the existing economic situation is based upon the theories of Adam Smith or Karl Marx. Under any and all conditions, he still must use materials to create tools to maintain civilization. Mr. Rosen, however, emphasizes the fact that for the sake of his own salvation and to maintain those values which are vital to that salvation, the engineer must turn his attention to sociology, economics and politics. Furthermore, his is the only type of thinking which can be used for the successful solution of these problems of humankind. The duty and self-interest of the engineer are therefore obvious.

Read Mr. Rosen's paper.

W. A. OLIVER, Editor

MESSAGE FROM THE JUNIOR REPRESENTATIVE

As the new state Junior Representative, I was honored to sit at the Feb. 9th Board of Direction Meeting in Chicago. It was indeed a pleasure to meet the caliber of men chosen to direct our Society. Their genuine interest and enthusiasm in the problems of the Society assured me that we are certainly in competent hands.

We, as Junior, E.I.T., and student engineer members have many things of which to be proud when considering the past accomplishments and future hopes of the Society. We too, however, must do our share to preserve what has been done and to extend even further the work and aims of the Society in the future.

Our first combined efforts should be to interest other young engineers in our Society and to make them worthwhile members. Approximately 13 per cent of the total membership is Junior, E.I.T., and student members. In conjunction with Mr. Askren's membership drive for this year we should make ourselves responsible for at least 13 per cent of the new members brought into each chapter. You are working every day with many young engineers who need only the proper salesmanship to make them a member. Be that salesman. Take them to your meetings, convince them that both the Society and themselves will benefit. Be a professional engineer! Do a professional job!

J. L. MILLS

PRESIDENT'S MESSAGE

When one flies from Moline to Chicago, one travels almost the full width of Illinois in about an hour. The distance seems short. Not so long ago the same trip by prairie schooner must have taken at least ten days of hard travel, and the distance must have seemed endless. The distance is still the same, of course, but our perspective has changed.

How much our perspective has changed in recent years was brought sharply to your new State President's attention at the recent NSPE State Presidents' Conference in Cleveland, Ohio. Nearly every state society was represented, including Puerto Rico, and it was obvious that everyone in attendance was seriously concerned with the matters on the agenda. It was interesting to note that the attitude of approach was one of confidence and assurance—an attitude of maturity which was not so obvious just a few years ago. For example, the snarls and snags which the EJC unity plan has encountered was discussed at length, but no one felt that NSPE was in an awkward position as a result of the EJC report, for the general feeling was that NSPE is now sufficiently well established that unity of the profession will come—and that it will come via the NSPE route. All NSPE needs is expanded membership and the so-called unity organization will be automatically recognized. Mr. Ryan, President of the Arkansas Society, was perturbed because only 60 per cent of the engineers in Arkansas belong to NSPE. Mr. Myhra, President of the North Dakota Society, indicated that his state listed about 70 per cent of its registered men as members. Mr. Van Tobel of Nevada figured his state society included nearly 80 per cent of Nevada's registered engineers. The representative from Illinois kept very quiet, for with only about seven per cent of our registered men in NSPE we have little to brag about. When we look at our total membership and then look at the number of registered engineers in Illinois it becomes apparent that we must change our perspective.

During the coming year it is my earnest desire that we build our state society so that we can assume our

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\$2.00 per year in advance to members of the Illinois Society of Professional Engineers. \$4.00 per year in advance to non-members in U.S.A. and its possessions, Canada, and Mexico. Foreign \$6.00. Single copies 40c. Published by the Illinois Society of Professional Engineers, Inc., at 631 East Green Street, Champaign, Illinois.
Entered as Second Class Matter April 27, 1949, at the Post Office, Champaign, Illinois.

rightful place in the national picture. We must increase membership tremendously. We must encourage our many State members to apply for National membership. We must eliminate the long lists of delinquents whom we drop each year. We must undertake a program of public relations and public information wherein the Illinois Society becomes well known to the man in the street. We must undertake a program of professional education aimed at the engineering student—a program which will indoctrinate the ideals of our profession early in the man's career. We must build carefully and perhaps cautiously in some cases, but it is imperative that we build!

During the months ahead it is hoped that each Chapter will extend an invitation to the President to visit with them and to discuss the Society work. We have a big job to do, but it is not an impossible one. Remember the old engineering motto: "The difficult we do immediately—the impossible takes a little longer."

A. D. SPICER, President, I.S.P.E.

VOX SECRETARII

P. E. ROBERTS, Ass't Secretary

Professional Interest

There is evidence that professional engineers are becoming actively and aggressively interested in their professional and economic development.

Over the past one hundred years engineering skills have grown from relatively simple applications of mathematical formulas to a highly complex and widely diversified scientific processes. Unfortunately, as each development came into existence, the new group went off at a tangent from civil engineering. While the professional and economic problems of all engineers is similar, the technical development has been so specialized that the engineer has followed his technical development to the exclusion of his other interests. This development in the medical and legal professions, on the other hand, had the effect of solidifying the respective professions rather than scattering them. Again, the engineer was engrossed in his technical problems and in the past cared little whether his fellow man recognized his professional status. During the same period, the medical and the legal profession jealously guarded their professional status. The legal profession at an early time realized the advantage of becoming actively engaged in politics.

Within the last decade, the engineer has become conscious of the fact that he is an important part of not only his community but also national development. Suddenly he has realized that the politician has maneuvered himself into a powerful position. The engineer knows that today he can no longer ignore social problems.

Unlike other professions, the engineer created the tools, machines, structures and vehicles which brought into being most of the present day social problems. Literally he created a mechanical monster over which he has

lost control. With the new horizons ahead in the application of atomic power to domestic use, in the best utilization of high speed communications, in the maximum benefit to be derived from tremendous speed transportation, it is vastly more important that the engineer consider the impact on society of each new development. The engineer is as much a part of social development as he is technical development. It is not his choice to ignore the further complication of already difficult social problems. He must face the fact that his professional and economic development must keep pace with his technical development.

In many ways the Illinois Society of Professional Engineers is promoting professional and economic development. The increased interest in public relations is a step toward a better understanding of the engineer in engineering problems by the people of the community and the State. Public service programs which have been conducted by various Chapters is a part of the answer. The active participation in the political arena by individual members of the Society is helping to break down barriers. The conscious effort to promote Unity among the separate segments of the profession is adding its bit toward the better understanding of engineers by the public. Expositions similar to the Centennial of Engineering is a long step in the right direction. Each of these activities is helping to raise the level of the professional status of the engineer.

Maybe the heavy tax burden, maybe the increased activity of the medical profession in politics, or maybe for some other reason, there is a more active interest in professional and economical problems, but regardless of the reason, the interest is growing. The engineer is demonstrating that he can be a leader in social life as well as a leader in his profession.

LAKE COUNTY ENGINEERS HEAR JOHNS-MANVILLE CORP. EXECUTIVE

Approximately 55 members and guests of the Lake County Chapter of the Illinois Society of Professional Engineers attended a recent meeting at the Swedish Glee club.

The program featured James Miller, superintendent of the transite pipe division of the Johns-Manville Products Corp. here, who presented a historical and technical lecture on "The Manufacture and Field Use of Transite." His lecture was followed by a sound movie entitled "Transite Pipe." Miller was introduced by Emmett Day, personnel manager of the plant.

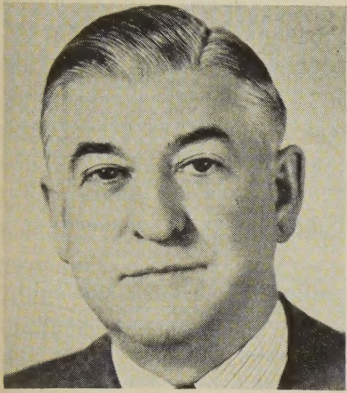
PEORIA AREA CHAPTER

A short business meeting was held on February 21, 1952, after which Dean Russell Gibbs of Bradley University gave a talk on the future outlook for engineers. See a report on this talk by Dean Gibbs in the ILLINOIS ENGINEER for March, 1952, page 5.

Loran D. Gayton

The Illinois Society of Professional Engineers wishes to pay tribute to one of its most honored and loyal members, Loran D. Gayton, who died suddenly on Friday, December 28, 1951, in his home at 8226 Drexel Avenue in Chicago.

Mr. Gayton was born in Boston, Massachusetts, on May 19, 1884. After attending high school he came West and entered the employ of a construction company. He became a construction engineer, building such structures as viaducts, dams, and one of the first reinforced concrete buildings in Chicago.



Loran D. Gayton

To further his technical education he attended the University of Illinois from 1910 to 1913, and received his degree of Bachelor of Science in Civil Engineering. Later because of post-graduate work, he was honored with the Professional Degree in Civil Engineering.

His latest honor from his alma mater was to address the annual convocation of the Department of Civil Engineering last May and make the presentation of awards to two outstanding civil engineering students. He was an honorary member of Chi Epsilon, Honorary Civil Engineering Fraternity.

"Larry," as he was affectionately known, spent his adult life in the service of the City of Chicago. In 1913, he became a draftsman in the Division of Water Works Design of the Bureau of Engineering. He passed upward through various positions until he became Engineer of Water Works Design, and then later he became City Engineer, which position he held, with the exception of a few years, from 1927 to 1941.

Among other important public improvements built while he was City Engineer, eight modern bascule bridges and a vertical lift bridge were opened to traffic. Also, the South Branch of the Chicago River in the vicinity of Roosevelt Road was straightened by cutting a new channel and filling in the old one.

Since 1941, he has had the title of Assistant City Engineer in Charge of Construction, and was in charge of the design and construction of the City's new South District Filtration Plant through the substructure stage.

Mr. Gayton was a well known writer on engineering subjects and his articles were widely published in engineering publications. He was a Registered Structural Engineer and a Registered Professional Engineer in the State of Illinois. He was a member of the Western Society of Engineers, the American Society of Mechanical Engineers, the American Society of Civil Engineers, the American Water Works Association, the American Public Works Association, and he was past president of the Illinois Society of Professional Engineers, the Illinois

Section of the American Society of Civil Engineers, and of the Chicago Engineers' Club. He was also a member of the South Shore Country Club.

Mr. Gayton leaves to mourn him, his wife Margaret, a daughter Jean, wife of Dr. Walter Carroll of Chicago, a son John of Cranston, Rhode Island, and four grandchildren.

Mr. Gayton will long be missed by his many friends in the Illinois Society of Professional Engineers.

AN OFFER OF SERVICE— ROCK RIVER CHAPTER

The following letter was sent to many communities in their area by the Rock River Chapter.

Dear Sir:

Your city is within the sphere of influence of the Rock River Chapter of the Illinois Society of Professional Engineers and we wish you would consider us as a member of your community. Our chapter has about one hundred Registered Professional Engineers, who are practicing in many fields of engineering, and our advice or opinion may be of value to your community on some project while in the planning stage.

If such an occasion should occur in the future, we hope you will call us. It is not our intention to interfere with the internal affairs of your community nor do we propose to do your engineering work, as we offer our services without charge. However, we want you to know that we are interested in the "Engineering Welfare" of your community.

An overall, long range plan is a benefit to any community and we hope your community has one.

When you call us, please mention the type of project, in order that we may have present an Engineer who is qualified to advise.

Very truly yours,

Community Planning Committee

David Crawford, Chairman

819 Depot Avenue

Dixon, Illinois

Robert Renwick

A. J. Pana

POSITION OPEN

Title: Public Works Director and Building Commissioner.

Location: Village of Park Forest, Illinois.

Salary: Approximately \$6,000.00 per year.

Date of Appointment: As soon after April 15th as possible.

Education Required: Engineering degree.

Experience Required: Municipal Public Works and building inspection experience, or experience as nearly comparable to this as possible. Ability to direct a small group of laborers.

Duties: (1) Direct and program the maintenance of streets, sidewalks, street lights, storm and sanitary sewers, buildings and grounds. (2) Administer the building code and coordinate building, plumbing and electrical inspections. (3) Act as engineering advisor to Village Board of Trustees, Village Manager, and upon occasion, to the Plan Commission. (4) Make studies of proposed installations by subdividers of streets, sidewalks, sewer and street lighting systems. Make examination of such facilities after installation, and prior to public dedication. (5) Maintain engineering files. (6) Assist in preparation of the budget.

Applications: Contact Village Manager, Village of Park Forest, 200 Lakewood Boulevard, Park Forest, Illinois.

Interviews: Interviews will be arranged with leading candidates after the receipt and study of applications. Please do not come for an interview until requested. All candidates will be notified of results.

The Responsibilities of the Young Engineer to His Profession and to Society

C. G. A. ROSEN, Engineer and Consultant, *Caterpillar Tractor Company, Peoria*
(Presented before Champaign County Chapter, Dec. 6, 1951)

I am grateful for the privilege and conscious of the responsibility placed upon me tonight to speak on the subject: Responsibilities of the Young Engineer to His Profession and to Society.

Four hundred years ago Magellan's crew circumnavigated the world, requiring one year of time. In 1948 the globe was circled in three days and twenty hours. Today we measure distance in time, not miles. Our world is a small fraction of the size it was in Magellan's day. What changes have been wrought by the miracles of the engineer! In my own time, for instance, I have seen the great fleet of bowsprits of sailing clippers on the Embarcadero of San Francisco, disappear as if by a magic wand, giving place to the dominance of the steam-turbined ocean liner and the great Diesel-motored freighter. Similar Aladdins have caused the horse and buggy to yield to the automobile, the captive balloon to the airplane.

The era of electronics has achieved the measurement of infinitesimal forces, the feeblest velocities and the most transient of phenomena. Recently the Atomic Energy Commission announced the development of an atomic clock measuring time in a fraction of a billionth of a second. The engineer has achieved a major part in all of this, a product of his brain and will.

"It was imagination," said Victor Wagner, "that enabled man to extend his thumb by inventing the vise, to strengthen his fist and arm by inventing the hammer." Step by step man's imagination lured, led and often pushed him to the astonishing heights of power he now so apprehensively occupies, that is the speed of the world into which you as young engineers are stepping. The implications of the future are overwhelming, the burden of the challenge to carry on will be on your shoulders. That is why I have been asked by your program chairman to direct my remarks to the students and young engineers present tonight. I hope to challenge your thinking on your responsibilities to your profession and to society.

On this vehicle of progress on which we are traveling, the trained engineer is definitely at the throttle. That is as it should be, but the dispatcher, who sets the signals or determines the right-of-way is the politician. Despite the potential distance covering capacity of our progress, the actual velocity of travel and the arrival time are controlled by the whim of the men we elect to mold the course of our society.

These two functions have been all too long at loggerheads, and the day is fast arriving when coordination of purpose must be consummated or we will wreck the whole power plant of progress.

The failure of statesmen, politicians, economists and society itself to handle the problems of an ever more compressed, ever more active world society, has largely resulted in our efforts as engineers and scientists being diverted from the problem of making better things for better living, to devising methods and manufacturing weapons for the more complete and rapid annihilation of the human race. To arrest this process of destruction you, yourselves, must be prepared to step into larger fields of social activity than are ordinarily envisioned as the fields for technologists, engineers and scientists.

That is why the young engineer has a responsibility both to his profession, to maintain its progressive growth, and to society, to solve the problems which deter the achievement of that growth.

Why place the stress on youth? Because basically we are all creatures of habit and in the young man habits are in the formative stage, subject to influence and direction, a twig which can be bent to give form to the structure of the tree of life. In older men, habits may need pruning or re-orientation, but the directional tendencies have already been set. However, at no time in life can discipline be discarded if the fruits of living are to be nurtured and expanded.

Habit formations lead to life trends. The poem by Miss Wilcox well illustrates this point:

"One ship drives east, and one drives west,
By the selfsame wind that blows.
It's the set of the sails, and not the gales,
Which determines the way it goes."

Fortunate is the man who has oriented his directional tendencies. His life has a purpose; he is drawn as if by an irresistible lodestone toward the pole star of his career.

I grant you, advice is cheap. It was quite significant a short time ago to hear an outstanding engineer say, "In my retirement years I am supposed to advise people who don't want to be advised." However, as young engineers, it is not too early to apply engineering techniques to the problems associated with your own careers. Look for the facts and let the facts win! Often the senior student of engineering asks the question: "What is it like out on the job?" If you would like to know, I will use the prerogative of age to speak my piece.

We live in a difficult age, an age of utter contempt for the economic lessons of history. History proves that we are more successful in building enduring bridges than in building a lasting society. Bridges are easier to build. The tower of Babel was a magnificent engi-

neering achievement, but its social implications led to confusion and chaos.

This is an age of pseudo-scientific thinking in approaching our political and economic phases of life.

The problems of society are complex, but so also is the design of a 50,000 kilowatt central station. Yet, in designing such a station we take into account the full background of scientific knowledge. We exact the tested engineering experience of many men into teams to accomplish the efficient production of power. But in the problems of our society we try to solve them by using politicians of no background, men who have no respect for accumulated experience or documented knowledge. To solve the problems of our age and to see clearly the perspective of the future, we need to apply engineering techniques to approach satisfactory operating efficiency in society.

"The young engineer," says Clarence Francis, chairman of the board of General Foods Corporation, "is called to face important obligations of leadership." These obligations are:

1. He must have a breadth of vision which transcends technical competence and which will develop an appreciation of trends affecting our national and corporate welfare.
2. He must be resourceful—try to anticipate events.
3. He must determine to delve into causes.
4. He must have a healthy dissatisfaction with existing conditions.
5. He must have an urge to improve and invent.
6. He must have the ability to inspire men to work with faith.

Mr. Buckley, president of the Bell Telephone Laboratories, at the inauguration of the new president of Case Institute of Technology, said this:

"As the problems of government increasingly involve technical affairs, the engineer will be given the opportunity to participate increasingly in public affairs. Just as engineers in industry have had administrative responsibility thrust upon them, so will engineers be drawn into administration of public affairs. There are many ways in which they can serve but to be effective, they must gain experience with human problems as they have learned to deal with physical problems. Wherever they serve, their outstanding good qualities, especially their objectivity and honesty and their sense of responsibility will win for them acclaim. How rapidly they rise and how much they can contribute is in the hands of the engineers themselves. The unquestionable evidence of their increasing consciousness of public responsibility outside of their technological realm is one bright ray of hope for the future."

What is a practical program, which we, as engineers, can promote to improve the influence of the engineer on society? Here are a few simple suggestions as offered by Mr. Buckley, and amplified to suit our theme:

1. Inform the public about technical matters by more effective methods."

Clarify a vision of the future as to its tremendous technical possibilities. If the engineer is to educate the lawmaker and the voter he must learn how to tell his story in terms of values which can be understood by the layman. The big problems of industry today are largely due to the public's lack of knowledge relative to the economic impact of technical progress.

2. "Develop the appreciation of lawmakers and statesmen for the particular use of engineering talent."

Certainly the engineering that has gone into our public works seems to have outranked in quality, the political and economic philosophy upon which they have been undertaken and financed.

3. "We should foster the application of the scientific method to all the operations of society."

We can hope to learn more than we now know by scientific observation and the analysis of the uncontrolled experiments of society. Within the federal structure of our own nation and in the great variety of political and social patterns over the world, there is opportunity for observation of effects of changes in political and social parameters. That is, of course, the field of the social scientist rather than that of the engineer or physical scientist. But one is led to inquire whether some of the techniques of the latter might not be applied. For example, we have found that among scientists of different skills cooperation is a powerful tool in effective operation in industrial research. Isn't it possible that team-work among physical and social scientists might unravel some of our complex social and economic problems? An engineer's interest and responsibility must embrace economics, politics, security and public affairs. He must be fully aware of the impact of his profession on the life of the community.

4. "The engineer should, himself, get into politics wherever possible and strive actively to make of himself a statesman."

Perhaps only a few engineers can claim access to this top calling, but it is hoped that more definite effort in that direction will lead to a better informed society. At least, all of us should feel the heavy obligation of participating in government—for we are the government. Unless we assume this responsibility as a personal challenge, we might well follow down the road of Hitler's Germany.

It may be of value to recite an incident which took place in Germany in 1934. At that time it was my pleasure to visit near Hamburg, the laboratory where the fluid coupling was invented. This development is a basic principle in all modern automotive transmissions used in our automobiles: the fluid drive, the torque converter, and the hydromatic transmission.

The time of my visit was shortly after Hitler had taken over dictatorial power for Germany. Therefore, my trip had been hampered by many scuffs with "Brown Shirts" and government agents. I was interested in

discussing with the intelligent manager of the laboratory the uncertain situation and the prospects for Germany under the new regime. May we call him Professor "X"?

Professor "X" pointed out to me the apparent happiness of his research men while pursuing their chosen field of endeavor. To his mind, as long as it were possible for men to find joy in their work and in their families, why should they be concerned over matters of State? Let the experts in politics carry on in their own way according to their own lights, while experts in business and science be left alone to expand their talents and pleasures. As long as one sphere did not interfere with another, then let Berlin have its Hitler to rule the nation as he wished. With much optimism he said, "Let us see what happens. It may be the best for all of us." That was over seventeen years ago. He could have repeated Fitzgerald's words:

"But leave the wise to wrangle, and with me

The quarrels of the world let be.

And in some corner of the hubbub couched

I'll make game of that which makes as much of me."

This eminent engineer declined to exercise his freedom of choice in the affairs of State even to the free expression of his political opinions. This has been the thinking of the self-satisfied and smug citizens of every land who allowed the politicians to take over the destiny of their lives. We know what happened to Germany. Berlin chiseled away the rights of the individual to the property he had created or earned. This was done by substituting for them the ideal of security through the State. The alleged benefits of security in exchange for life savings, insurance and pensions constituted a long list of government activities, each of which was to secure the future, but each of which sheared away some liberty.

From the proud Hanseatic city of Hamburg, built around the Alster, with its world-famous Atlantic Hotel, we find the Hamburg of 1945, reduced to brick piles and ashes. What happened to the family of Professor "X"? There is the authentic reported story which I got in Germany last year, of the daughter of Professor "X" living in the basement ruins of their old home thirty-six miles east of Hamburg, in the Russian zone. Daily she must go out and work on the rubble heaps, for in the Russian scheme of victory, women and children must pay the price of defeat as well as men. Here she ekes out an existence with six other members of her family, while we enjoy in our automobiles the products of her father's genius. Was it smart for the professor to divorce his thinking from government affairs? Was it wise to let the politicians reach out and foreclose the future of his family?

Dare we sell out our birthright of freedom and make future generations pay the price of our indolence, our indifference, and our love of ease? Are we guilty of shirking our privilege of selecting our leaders who will preserve the durable values of our national and world existence as free men?

I wonder if we realize how far we have gone down the road of surrendering our liberty to power-hungry politicians for a will-o'-the-wisp security. The alleged benefits, bought by over sixty per cent of our savings, consist of a lot of alphabetical agencies, the sum total and end of which foreclose the future, rob the present, and sack the past. The prevailing doctrine of political philosophy is that all of our nation's ills are curable by the spending of our money. The Truman Administration spent eighty-one billion dollars more in the last six and one-half years than were expended in the previous 169 years of our history as a nation. Still we have no peace.

A fine end for a nation of once self-respecting pioneers, the pioneers who cleared our midwestern prairies, the pioneers who moved the course of civilization to the Pacific, the pioneers who built our colleges and established our great institutions of philanthropy and culture! Do we realize it would be financially impossible today for anyone to found an institution like Rockefeller Foundation, Mellon Institute, Harvard or Stanford Universities, or Ford Memorial Hospital? If we forget the virtues inherited from our pioneer forebears, we will not measure up to competition with a tough dictatorship.

These observations raise the question as to the mechanism by which general participation of the engineer in public services can be achieved. In large measure, the mass force of engineering thought can best be activated by unification of engineering groups. Today to be effective in any community it requires a high degree of unification. Basically, engineering is a service and engineering opinion is held in high esteem on any matters affecting the public welfare. How different this era from the one in which I embarked as a young engineer almost forty years ago. Today the engineering graduate is a pearl of great demand.

A unified engineering sponsorship could render a valuable public service by making articulate opinions on local problems of general interest. As Mr. F. A. Faville, chairman of ASME Engineering's Civic Responsibility Committee, puts it: "Why should we not come out of the kitchen and make our voices heard on things pertaining to engineering?" Not only is this considered of utmost importance in the civic obligations of the engineer, but it has a far-reaching potential benefit to the engineering profession. Although we are greatly divided as to specific technical interests and these divisions are essential and must be preserved, they should be coordinated. We are, as pointed out previously, all enlisted for a common purpose: "To advance the general welfare of many through the technical knowledge and creative ability of the engineering profession."

Likewise it is our purpose collectively to promote recognition and cooperation among the various branches and groups of the engineering profession; to advance the standards of engineering education; to maintain high professional standards among engineers; to enhance the recognition of engineering as a profession; and to further the professional progress of young engi-

neers. These are all objectives which can make dynamic impact upon a society by professional unification.

A final word to young engineers as to self-professional development in the engineering world. This question is ever in the minds of young engineers: "How can I plan my career to achieve success in the engineering profession?"

The composite of the ideal engineer is a stature of many facets. His qualifications may well be expressed by the example of Leonardo da Vinci. This medieval Florentine genius was peculiarly endowed. He possessed the observing eye of the painter and sculptor, the penetrating faith of the philosopher and religionist, the cold deductive logic of the mathematician, and the enterprising spirit of the inventor.

A phenomenon in nature commanded his undivided attention, impelled him to believe that a reason was behind its existence, and that a useful end was its purpose. He invited the aid of mathematics to establish a law for its control and duplication, and inspired inventive effort to apply his garnered information to practical performance.

His name is immortal. If he would speak to us today I am sure he would disclose the underlying motif of many an illustrious engineer: "Seek ye ever the knowledge of fundamentals and all these other attributes will be added thereto."

And what are these fundamentals? The first, I think, is: "The constant discipline of the mind." And the second: "The enthusiastic will to serve."

We can find many exemplary men who constantly strive to discipline their minds. How much time will you devote each week to mental discipline? Not just thumbing through magazines, looking at the pictures, and casually reviewing the headlines, but actually doing the thing that is necessary to discipline yourself to analyze and understand the subjects you are reading. Will you review the old textbooks and "bone up" on fundamental principles of physics, chemistry and mathematics? Donald McLaughlin does, and he is president of a large British mining syndicate covering operations all over North and South America. Will you search out new subjects to broaden the horizon of your technical knowledge? Haraden Pratt does. He is vice-president of International Telephone and Telegraph Co. How much concerted, concentrated observation will you give to the analysis of passing natural phenomenon? Kettering does. Will you *will* yourself to learn the secrets of thought cradled in the minds of men of foreign countries by learning their language and understanding their ways? Den Hartog does and he does it continuously, even to the point of learning some of the native Malayan languages.

The "will to be of service" makes a catchy slogan. I wonder how much we cultivate the "will to do" and the "will to be of service," to be of service to our job, to our profession, to be of service to our nation, to be of service to the world. Some four years ago Bob Rus-

sell, head of Research of the Esso Laboratories of the Standard Oil Co. of New Jersey, was asked to deliver a lecture in Buenos Aires, Brazil, on "Catalytic Cracking Methods." He considered it a challenge to render service as an American engineer to the doubting Thomases in South America. He presented a complete technical lecture with a full discussion period in native Brazilian Portuguese. He had not known Portuguese previously, but achieved it because of his long years of self-discipline and his enthusiastic will to be of service. On short notice he commanded this ability to the mastery of technical Portuguese. Of greater significance: He learned the thinking processes of the South Americans so that he could step into their minds and win their confidence in the integrity of his purpose.

Two years ago I attended the ninetieth birthday celebration of Professor William Durant of Stanford University. He is responsible for many achievements, but perhaps his most famous work is on Screw Propellers, both marine and air. With extreme clarity of expression and depth of feeling, he thanked his colleagues for the honors bestowed upon him, but his closing remarks were perhaps the more poignant: "The crowning happiness of my life, blessed as it has been by these ninety years, is the joy of having been of service to my chosen profession." You must be a good soldier before you can be a general.

All measures of success are relative. Some achieve fame, others fortune, according to certain standards. But under the microscope of one's own peace of mind the measure of one's personal success is this: "What have I wrought in myself that will give satisfaction, will render service, and provide joy in living and in work?" *That* measure of success any man may attain, and without it no accomplishment is worth the having.

CAPITAL CHAPTER FLUORIDATION MEETING



The panel that discussed "Fluoridation of Public Water Supplies" at the regular February 22, 1952, meeting of Capital Chapter of the Illinois Society of Professional Engineers, Springfield, Illinois. President Ryburn, on the left, is opening the meeting. (See News from Chapters.)

CHICAGO CHAPTER NEWS...

Editor—H. F. Sommerschild

53 W. Jackson Blvd.

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1952 Committee Appointments

Legislative—This committee will suggest proper legislation, review proposed legislation, and initiate action when action appears desirable.

Duncan M. Campbell, chairman; LeRoy H. Cather, Burton A. Scheidt, Leo M. Spurling, William F. Thornton, Robert Wallace, Theodore Van Zelst.

Membership—This committee will plan, organize, and conduct a membership drive for the chapter.

John G. Duba, chairman; George J. Chlebicki, John A. Fensterle, Kenneth A. Johnson, Fred Kirchner, Samuel R. Lewis, E. H. Olsen, Carl E. Schmitz, Harold F. Sommerschild.

Program—This committee will plan and supervise chapter programs.

Chester A. Arentz, chairman; Carl E. Schmitz.

Public Relations—This committee will prepare the Chicago news for the ILLINOIS ENGINEER, and promote public relations in every way possible.

Harold F. Sommerschild, chairman; George L. DeMent, John Dolio, John G. Duba, William H. Jacobs, Randolph A. Lonier, A. L. R. Sanders.

State Building Code—This committee will collect and analyze material for a proposed state building code.

Bernard A. Moore, chairman; L. J. Krane, Hyman Krass, Henry Miller, G. L. Oppen, Henry Penn.

Young Engineers—This committee will promote the interest of young engineers in the society and in the profession.

Howard J. Hansen, chairman; John G. Duba, L. C. Hardison, H. O. Johnson, J. M. Keneipp.

New Members

Chicago Chapter extends a hearty welcome to the following men who have been elected to membership in I.S.P.E. We covet your attendance to all meetings and your cooperation in all activities of the chapter:

Kenneth P. Milbradt, Maurice E. Fine.

March 13 Meeting

Those attending this meeting were most fortunate to hear Mr. T. P. Collier speak on the subject, "The Export of Technical Know How." Mr. Collier related from a vast experience why he advocated the "Export of Technical Know How." He stated that 57 per cent of our imports are received from under developed areas. That 73 per cent of our imports of critical and strategic materials, some of which have no domestic substitute, are received from these areas. Mr. Collier concluded that we must provide these areas with technical know how so that they can expand their productivity to provide us with needed materials.

Attendance Committee

How many of you are acquainted with that grand guy John Fensterle? John is chairman of the attendance committee this year and he is working diligently to increase the number of members that take advantage of the meetings held on the second Thursday of each

month. Why don't you attend the next meeting and get acquainted with John?

Do you know that . . .

John Gnaedinger is serving as secretary of Illinois Section ASCE. Don't gnash your teeth, the "G" is silent like . . .

R. A. (Lonnie) Lonier is editor of the Illinois Highway Engineer, the official publication of the Illinois Association of Highway Engineers.

Carl Metz is enjoying a time in Florida after a trip to Washington, D. C., as a member of a panel which discussed the conservation of critical materials.

Bernie Moore is program committee chairman of Chicago Engineers Club.

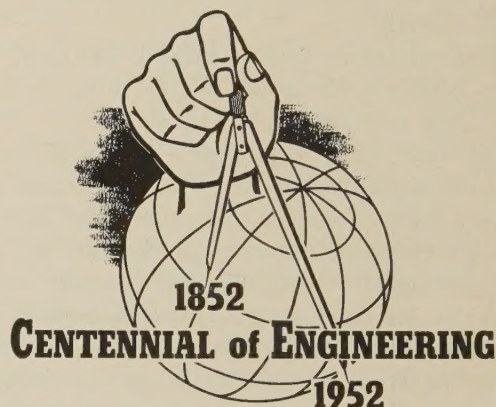
O. W. Eshback has been nominated for the presidency of Western Society of Engineers.

Hal Sommerschild is now associated with the Abell-Howe Company.

John Dolio was recently elected as a Director of the Chicago Engineers Club.

But you don't know . . .

The I.S.P.E. member that was a front liner at the recent Chicago Engineers Club stag party.



Twelve of the nation's leading engineers were named recently to act as chairmen for the special general meetings comprising the convocation period of the Centennial of Engineering to be held in Chicago this summer.

The convocation, which is scheduled from September 3 to 13, is expected to bring more than 25,000 leaders in American and foreign engineering bodies to Chicago. Already 51 American groups comprising practically all phases of engineering are pledged to participate in the convocation program, together with nine foreign societies from Great Britain, France, Japan, India, Mexico and Canada. The convocation general meetings will be in addition to the more numerous technical meetings planned by the individual societies.

COST OF LIVING INDEX

The correlation factor to be applied to the I. S. P. E. Schedule of Minimum Fees and Salaries was 188.3 for February, 1952. The factor is based upon the U. S. Department of Labor's most recent Consumer Price Index.

News From Chapters

Lake County Chapter

The Lake County Chapter of the I. S. P. E. held its monthly meeting December 19, 1951 at the Swedish Glee Club House, Waukegan, with 27 members and guests present.

The meeting was called to order at 8:05 by S. A. Simonson, acting in the absence of President Calkins. The minutes of the November meeting were read and approved. The treasurer's report was approved.

Various committee chairmen congratulated their committeemen on cooperation and accomplishments during 1951.

Chairman Hooper reported for the Building Code Committee. After some discussion it was regularly moved and seconded that the chapter recommend to the Waukegan City Planning Commission the early adoption of the Basic Code of the Building Officials Conference of America, Inc. and the changing of the code by amendment, as may be necessary, after its adoption. Motion carried. The secretary was directed to notify the Waukegan City Planning Commission by letter of this action. The Building Code Committee was commended for its fine work.

A communication in regard to a policy on fluoridation of drinking water was referred to Mr. Domke for study and comment.

The new slate of chapter officers for 1952 was unanimously approved as follows: Cyril Drew, president; Robert Kramer, vice-president; Irwin Lietzke, secretary-treasurer.

Telegram from outgoing President Calkins saying business called him away unavoidably and thanking all officers and committees for good effort in 1951.

Chair turned over to new President Drew by Mr. Simonson.

Mr. Lietzke introduced Mr. Wiedeman of the Illinois Bell Telephone Company who presented a most interesting program on "Recent Developments in Telephony."

Meeting adjourned at 10:35 p. m.

R. G. KRAMER, *Secretary-Treasurer*

DuKane Chapter

The regular monthly dinner meeting was held at the Red Lion Inn on January 17, 1952 with 28 members and guests attending. Following dinner, the following guests were introduced: Aldermen Adams, Schoberlein, and Stuckley of Aurora, N. F. Thomas, S. W. Carlson, Mr. Keiser, and Carl Hauser.

The minutes of our last meeting were read and approved.

For the benefit of those not present last month, the new committee appointments were again read.

Chapter Representative Rob Roy again reminded the chapter of Engineers' Week and outlined his plan for

publicity as our Publicity chairman. He also called attention to the Annual Meeting at Peoria on April 3d, 4th, and 5th.

A suggestion that a joint meeting with the Joliet Chapter be arranged in the near future was warmly received, and the necessary contacts will be made.

Vice-President W. A. Rakow stressed the importance of securing new members to offset the losses incurred.

The program for the evening was arranged by F. S. Weir. Mr. John Schmidt, Assistant Basin Engineer for the U. S. Public Health Service, showed movies showing how our water resources have been abused by pollution, and the combative measures sponsored by the USPHS. A question and answer period followed which was highly interesting and informative.

GEORGE M. BOOTH, JR., *Secretary*

Illinois Valley Chapter

The regular meeting of the Illinois Valley Chapter of the Illinois Society of Professional Engineers was held on January 22, 1952 at The Pines, north of Streator. The attendance was not so good as our members from LaSalle, Peru, Spring Valley, and other distant points did not care to drive on the icy pavements. Only 24 members and our guest speaker were present.

Considerable business was taken up and also the officers for the coming year were elected.

The Nomination Committee, consisting of Mr. Grayhack, Mr. Cullen, and Mr. Miller, presented the following slate: Louis Bowman as president, Dean Antrobus as vice-president, and Ross Waite as secretary-treasurer. This slate was voted to be the officers for 1952.

As our Director Frank Dunavan is in the hospital for a minor operation, Mr. A. D. Bryant has volunteered to represent our chapter at the February 9th meeting in Chicago.

Attorney George C. Hupp gave a very interesting talk on "This Is Our Problem," which concerns the American way of life as well as living conditions in other countries.

As no further business was to be taken up, President Moran turned the meeting over to the new president, who gave a short talk.

E. DEAN ANTROBUS, *Secretary-Treasurer*

Ambraw Chapter

The regular meeting of the Ambraw Chapter of the Illinois Society of Professional Engineers was held at the Legion Home in Newton, Illinois, on January 18, 1952, having been postponed from December 17, 1951 due to weather conditions and icy pavements.

Dinner was served at 7:00 p. m. to twenty-four members and one guest. The meeting was called to order at 8:00 p. m. by President B. P. Johnson.

Minutes of the meeting held September 26, 1951 were read and approved.

Mr. John Henline, Chapter Representative, announced the dates of the Chapter Officers Meeting and the 67th Annual Meeting.

President B. P. Johnson gave a discussion on engineering fees and salaries.

The election of officers was the next order of business.

The Nominating Committee reported the following members who had been nominated by their committee:

President—R. B. Walters

Vice-President—John A. Hardwick

Secretary-Treasurer—I. C. Bliss

Chapter Representative—John Henline.

It was moved by J. P. Lyons and seconded by D. R. Connor that the nominations be closed and that the secretary be authorized to cast a unanimous ballot for all officers nominated. Motion carried.

Mr. Walters, the newly elected president, in accepting his office opened discussion on the future meetings in 1952.

Mr. B. P. Johnson presented the proposed program for the 67th Annual Meeting to be held in Peoria, April 3rd, 4th, and 5th, and asked for suggestions and comments.

The meeting adjourned at 8:30 p. m.

JOHN A. HARDWICK, *Secretary*

Central Illinois Chapter

The December meeting of the Central Illinois Chapter of The Illinois Society of Professional Engineers was held at the Greider Cafeteria at 6:30 p. m., Thursday evening, December 27, 1951, there being 25 members in attendance.

Walter G. Scherer, chairman of the Nominating Committee, presented the following slate of new officers for the coming year:

President—John F. Sweetnam

Vice-President—E. C. Hamill

Director—Frederick Tratzik.

There being no further nominations from the floor, the above officers were elected by unanimous ballot.

A preliminary report on the postcard ballot, which is being taken to get the preference of the membership for holding our meetings with or without meals, shows a strong preference in favor of having meetings with a meal preceding.

We have been hearing and reading quite a bit lately on the subject of "Unity in the Engineering Profession," but our idea of what is really involved in this matter was very much different after listening to a discussion by one of our own members who is very close to what has been going on all over the nation. Our past National and State President, Mr. Alex Van Praag, Jr., has been devoting a great deal of his time and energy to the problem of working out an organization to have a national "voice" that will really represent the Engi-

neering Profession as a whole. To call it simply "Unity in the Engineering Profession" sounds too simple, for it is by no means as simple as that. Alex explained in much detail the cooperative effort and work that has been going on for the past several years, and it appears that a lot of progress is being made. But there is still much more to be done, and the solution is probably not yet in sight.

Our program chairman, Ed Crawford, secured two excellent colored films from the Rosierucian organization. One was on "Egypt the Eternal" and the other on Tibet, "Men and Gods." These proved to be pictures of excellent quality and were interesting. In addition to seeing a great deal of what remains of ancient times, we also saw much of the life in these countries as it is lived today.

FLOYD E. TROXEL, *Secretary*

Rockford Chapter

The November meeting of the Rockford Chapter, I. S. P. E., was held as a dinner meeting at the Faust Hotel on Tuesday, November 20, 1951, with 58 members and guests present. The meeting was presided over by President Debes. All chapter business was postponed to the December meeting.

Since the meeting was planned as a special Civil Defense meeting and our State President, Virgil E. Gunlock, was to give the address of the evening on "Organization and Operation for Emergencies," several outside organizations were invited to participate. Only a fair response was obtained.

Following the dinner our group was joined by approximately 70 representatives of Municipalities and Fire Departments in the Rockford Mutual Aid Area, so that they might hear Mr. Gunlock's talk.

President Gunlock gave a very interesting and informative talk on the Chicago Civil Defense organization and reported on the trial mobilization held earlier the same day, of the Chicago Disaster Corps for a "dry run" to a simulated bombing of Rockford. Following the presentation of Mr. Gunlock's talk, a lively question and answer period developed.

The December meeting of the Rockford Chapter, I. S. P. E., was held in the Auditorium of the Gas-Electric Building on Wednesday night, December 12, 1951, with 52 members and guests present. The meeting was called to order by President Debes at 7:45 p.m.

Minutes of the previous meeting and treasurer's report were read and approved.

Mr. Millard of Freeport introduced Mr. Baumgardner of the Freeport High School, who presented President Debes with a gavel and block made by the Freeport Manual Arts Class.

It was reported that the Rockford Chapter now has a permanent address which is P. O. Box 592.

President Debes announced that the chapter is now listed on the Tool Engineers mailing list and their published listing of Engineering Societies.

The letter received from Mr. Wallace, Peoria Chapter, relative to the chapter's reaction to the problem of "Fluoridation of the Public Water Supply" was read. After some discussion, it was moved by Riedesel, seconded by Laswell, that the communication be referred to committee for study and a report made at the January meeting. Motion carried.

Mr. Groncki reported on the latest developments regarding the establishment of a local weather bureau office. A letter had been received from the Washington office to the effect that funds were not available at this time to expand their facilities. There is an office at the Greater Rockford Airport for the distribution of information, but they are not qualified to make weather predictions. Debes suggested that it might be possible to contact interested local groups to secure assistance in getting a full fledged local office. Considerable discussion followed.

Mr. Riedesel, Chairman Young Engineers Counselors group, reported that he had added Warner Johnson and Ted Nieman to his group. He then turned the discussion over to Royce Johnson, who reported on the recent luncheon held at the invitation of Mr. Blue of West High School. A formal report of this meeting was filed with the secretary for record.

Considerable discussion developed as to the salaries being paid Professional Engineers by local governmental bodies. A motion was made and seconded that the Chapter send a communication to the City Council outlining the schedule of fees and salaries for the various grades of engineers. Motion carried.

The report of the nominating committee was read. This report suggested Lyle B. Porter for president and Royce Johnson for V.P. Additional nominations will be accepted at the January meeting.

It was pointed out that our constitution provides for the Secretary-Treasurer to be appointed by the Executive Committee.

The meeting was then turned over to Program Chairman Duguid, who introduced Mr. Goff and Mr. Servi of the Zonalite Co., and Mr. Best and Mr. Arego of the Luse-Stevenson Co., who presented a very interesting talk and movie on the use of Z-Crete for underground pipe insulation.

Following the program a smorgasbord was served, compliments of the Central Illinois Gas and Electric Co.

No meeting was held in January. The February meeting of the Rockford Chapter, I.S.P.E., was held in the Auditorium of the Gas-Electric Building on Friday night, February 8, 1952, with 18 members and guests present. In the absence of President Debes, the meeting was called to order by Vice President Warner Johnson at 7:50 p.m.

Minutes of the previous meeting and treasurer's report were read and approved.

Henry Riedesel reported briefly on the activities of the Young Engineers Counseling Committee after which he turned the discussion over to Royce Johnson. Royce

reported that for the past week young engineers from the chapter had appeared before interested groups at West High School for discussions. Those appearing on the discussion panel were Bob Stringer, Robert Hansen, Ken Biddle, Jack Flodin and Olaf Begtrup.

Bob Stringer reported that there were three to four boys per class that were definitely interested in an engineering career.

East High School may call for similar discussions at a later date.

Warner Johnson reported that the Freeport schools were very interested in a similar appearance. Undoubtedly other schools will ask for assistance.

Royce Johnson reported on the recent meeting of chapter officers held at Peoria. Several ideas were presented and will be passed on to the new officers.

A lively discussion developed relative to ways and means of increasing the local membership. A possible program was suggested, but there were still some questions to be worked out. It was moved by Stringer, seconded by Royce Johnson, that John Duguid explain the proposal to the State Board of Direction for their comments. Motion carried.

It was suggested that the Fees and Salaries Committee investigate the availability of a current published list of fees and salaries.

Royce Johnson questioned the possibility of getting the State Registration Board to publish a list of registered engineers and architects. It was moved by Johnson, seconded by Riedesel, that we present the proposition to the Board of Direction at their next meeting. Motion carried.

The report of the nominating committee was read. This report nominated Lyle B. Porter for president and Royce Johnson for vice president.

In the absence of additional nominations from the floor, a motion was made and seconded, that the secretary be instructed to cast a unanimous ballot for the above candidates. Motion carried.

Henry Riedesel reported that he had received a letter from Commander Gilbert Henning, who sent greetings to the chapter.

The meeting was then turned over to Program Chairman Duguid, who showed a most interesting color movie, entitled "Walls Without Welds," by United States Steel Corp.

The meeting of March 4, 1952, was called to order by President Lyle Porter. President announced the appointment of Mr. H. A. Riedesel as Chapter Secretary.

Minutes of the previous meeting were read by Mr. Porter and approved as read. There being no treasurer report, the names of four new members were read and our four guests, Mr. Hugh I. Knobeloch, Gardner Machine Co.; James C. Heap, Fairbanks-Morse & Co.; Fred K. Unich, Rockford Antenna & Electronic Co.; and Mr. Curt Dodge, C. G. Dodge Co., were introduced and also one of the new members who was present, Mr. Alfred R. Wagstaff, of the J. L. Clark Mfg. Co.

Chas. Debes, retiring president, expressed his thanks to those committeemen and others who served with him during his tenure of office and then made a verbal report on the annual report of the State Registration Laws Committee, which report in written form was filed with the secretary of the chapter.

President Porter then read his list of committees, naming the chairmen, who are to choose their own members. These committees and their chairmen are as follows:

1. Ethics and Practices.....A. A. Lundgren, Chairman
2. Membership.....Royce Johnson, Chairman
3. Publicity.....William Day, Chairman
4. Fees and Salaries.....J. J. Graven, Chairman
5. Property.....Edwin Young, Chairman
6. Program.....John Duguid, Chairman
7. Student Counseling.....H. A. Riedesel, Chairman

Other committees and their chairmen are to be named later.

Under old business, Chapter Representative John Duguid reported in general on the State Board of Direction meeting held in Chicago Saturday, February 9, 1952, at the Electric Club, Civic Opera Building, and in particular on an off-the-record discussion on the subject *Chapter Membership* experiment as suggested by the local chapter, that experiments in chapter membership be conducted by the Rockford chapter.

Mr. Duguid's formal report is filed with the secretary.

Upon motion by Mr. Duguid and seconded by Mr. Lundgren, the chapter voted favorably to conduct an experiment in chapter membership as outlined fully in Mr. Duguid's written report.

The Vocational Counseling Committee's Secretary, Mr. Royce Johnson, then submitted a written report on the committee activities during recent months which report is on file with the secretary. Mr. Johnson also spoke briefly on these activities and that of the Engineer Panel whose moderator, Bob Stringer, went into more detail on their counseling program at West High School during the month of February. From all reports, the Engineers Panel Program at the High School was well received and appreciated.

The President directed Mr. Bob Galvanoni and Mr. A. A. Lundgren to prepare and send a letter to Dwain Wallace at Peoria in answer to his letter on "Fluoridation."

Under new business, Program Chairman Duguid reported briefly on the local executive board meeting and sketched his program plans for the year. In this respect his program plans, wherein members are sponsoring certain meetings, are rapidly being completed and a full calendar for the year developed. He also outlined the program for the April 16th meeting and indicated his plans for publishing a bulletin on chapter activities the first of each month.

Again, under the heading of new business, Mr. Duguid spoke of the plans of the Board of Direction for the State Meeting to be held in Peoria at the Pere Marquette

Hotel starting Thursday, April 3, and carrying on to Saturday, April 5, at which time a panel discussion has been arranged to cover the subject of Fees and Salaries.

Comments were offered on the subject of the activities of the Engineering Joint Council at the national level with reference to a "professional unity group" and the recent article in the February 22 issue *Engineering News Record*.

Following brief comments by others, the meeting was then turned over to Bob Galvanoni, the sponsor of the evening program. Mr. Galvanoni reviewed briefly "Fluoridation of a Public Water Supply" and then introduced Doctor Andrew Nyboer, a dentist, who spoke on the topic, "Does Rockford Need Fluoridation of the Public Water Supply?"

LYLE B. PORTER, *Secretary-Treasurer*

West Central Chapter

The February meeting of the Kewanee Chapter, Illinois Society of Professional Engineers was held in Rock Island, Illinois, February 21, in the Tri-City Labor Temple. The Secretary read the minutes of the January meeting which were approved as read.

President Missman called upon William Barnes of Galesburg, chairman of the Engineers' Week program, who told of the recent Engineers in Industry meeting held in Galesburg in connection with this anniversary week. He spoke of the 15-minute radio program which they had on a Galesburg radio station and told of the Service Club dinner in which our State President, A. D. Spicer, gave a talk. Chapter Representative Louis Pappmeier gave a report on the Centennial for Engineers to be held on September 3 to 13 in honor of the 100th anniversary of the founding of the A.S.C.E. Mr. Pappmeier told of the engineering exhibit to be held at the Museum of Science and Industry in Chicago. He gave a few remarks on the printing of the membership list and the Code of Ethics stated that the plan was not complete and these would probably not be printed for some time. In his remarks he also mentioned that Central Illinois Chapter has now organized a Women's Auxiliary. Attention was also called to the state meeting on April 3, 4, and 5.

A. D. Spicer told of the deferred plan which was temporarily tabled a few months ago whereby the name of this chapter was to be changed. He stated that the by-laws had been complied with and the State Board had given approval for such a change. It was then moved by Louis Pappmeier and seconded that the question of changing the name be again placed on the agenda. It was unanimously carried. It was then moved by Spicer and seconded that the name of Kewanee Chapter be changed to West Central Chapter. After some discussion it was carried. President Missman declared the chapter now West Central Chapter. It was moved by Bronson and seconded that a committee be appointed to select a new name for the chapter, this motion was lost.

Allen Boudinot gave a lengthy talk on the coming annual meeting of the Illinois Society to be held in 1953, told of problems which to be expected when a convention of this type was held and how the membership would have to work in order to make it a success. A motion was made by Barnes and seconded that the chapter extend to the State Society an invitation to hold its 1953 annual meeting in the Tri-Cities, motion carried.

The chapter was then shown a colored sound picture on the operations and maintenance of United Air Lines plane United 6534, which showed how the plane was completely serviced and then flown from the West Coast to New York and the navigation problems they encounter by storms. The film was shown through the courtesy of Mr. Don Fuelscher, manager for United Air Lines in the Tri-City airport. The picture was enjoyed by all.

The March meeting of the West Central Chapter of I.S.P.E. was held in Kewanee, Illinois, on Thursday evening, March 20, at 6:45 at Hotel Kewanee. The members and guests were introduced around the table, after the evening meal. The Secretary read minutes of the last meeting which were approved as read.

Chapter Representative Louis Pappmeier read a letter from Assistant State Secretary Roberts regarding the recent change in chapter name. It was moved by Pappmeier and seconded that the constitution of this chapter be changed to meet the requirements required by changing the chapter name, motion carried. Mr. A. D. Spicer stated he would make the necessary correction in our constitution and take the change to the State Board of Directors when completed.

State President Elect A. D. Spicer made a few remarks on his recent trip to Cleveland, Ohio, where he attended the Ohio State Professional Engineers meeting in which all State Presidents were invited. Mr. Spicer spoke of the large attendance of Ohio members and the State Presidents of which all but three were in attendance. He spoke of National Society plan to raise more capital for expansion of many projects which the society had in mind. He said the National Society now has 25,000 members and the N.S.P.E. would like to raise its annual dues from \$7.00 to \$10.00 to cover some of these projects.

President Missman spoke of the proposed annual meeting of the State Society for 1953 in which we have a bid for the place of the meeting and that Mr. James Palmer of Rock Island has volunteered to act as chairman of the general committees. He again called attention to the State Annual Meeting to be held in Peoria and asked all that could attend to try and attend.

Past President John Fulper introduced as the speaker of the evening, Mr. Hanzel, Public Relation Official of the International Harvester Company, Moline, Illinois, who gave a very interesting talk on "Cheaper by the Billions." Mr. Hanzel's talk was on the tax and spending situation which now confronts the people of the nation.

C. F. BATES, *Secretary*

DuKane Chapter

The regular chapter meeting was held on Feb. 21, 1952, at the Red Lion Inn with 21 members and guests attending.

The January minutes and the 1952 Treasurer's report were read and unanimously approved.

Acting upon instructions from the state office, E.I.T. John J. Fast was regularly elected as the DuKane Chapter member of the State E.I.T. Committee.

A letter from the Peoriarea Chapter was read regarding "Fluoridation of the Public Water Supply." After some discussion, the chapter went on record as favoring "public expression of opinion by Professional Engineers," and believing that "certain small villages and cities, with technical assistance, are capable of proceeding with the recommended operations and required reports." The chapter also went on record as standing ready to offer any necessary assistance in carrying out the program of Fluoridation of Public Water Supply.

President Dreier substituted for Chapter Representative Roy at the board meeting held February 9, and gave a very complete report of the meeting.

There was considerable discussion on Past NSPE President Alex Van Praag's Minority Report on plans for Engineering unification, and Chapter Representative Roy was instructed to endorse it on behalf of the chapter.

Engineer V. H. Kasser introduced the president of the Kane County Title Company in Geneva, Mr. A. J. Yates, as the speaker of the evening.

The regular monthly meeting was held March 20, 1952, at the Red Lion Inn with 29 members and guests in attendance.

The minutes of the February meeting were read and approved.

Chapter Representative Rob Roy again encouraged the members to attend the I.S.P.E. Convention in Peoria on April 3, 4, and 5.

President Douglas Dreier introduced the speaker of the evening, Mr. Robert Deidorfer, World Traveler and Free Lance Writer, who told of his travels in Africa and Europe. His observations were directed mainly to the Belgian Congo, a highly important source of uranium ore, which provided his subject, "Democracy's Jungle Arsenal." A very interesting discussion period followed.

GEORGE M. BOOTH, JR., *Secretary*

Lake County Chapter

The Lake County Chapter of the I.S.P.E. held its monthly dinner meeting at the Swedish Glee Club in Waukegan on February 20, 1952. Sixty-five members and guests were in attendance.

The business meeting was opened at 8:15 p.m. with an introduction of members and guests. The minutes of the January meeting were read and approved.

Mr. Siguard Simonson, Chapter Representative, gave a report of the recent meeting of the Board of Direction. The principal points covered are as follows:

1. It was suggested that the Chapter Publicity Chairman prepare the report of the Chapter meeting which will be published in the ILLINOIS ENGINEER.
2. Summary of the Status of work of the overall Society.
3. Information on the 100th Anniversary of Engineering to be celebrated in Chicago this September.
4. The State Society will mail a new list of Illinois Registered Professional Engineers.

Mr. Carl Anderson gave a report for the Publicity Committee. Through his efforts the Waukegan News-Sun carried three sets of pictures and articles publicizing National Engineers Week and the local chapter of the I.S.P.E.

Mr. H. T. Dixon presented a duplication of his remarks which were originally presented at the Monday noon luncheon of the "Forward Division of the Waukegan-North Chicago Chamber of Commerce." This was their luncheon of February 18, 1952, at which National Engineers Week was observed and the local chapter of the I.S.P.E. was honored. His remarks covered at least one of the most important reasons for the recent sharp decline in the number of Engineers School enrollment.

The main speaker of the evening was Mr. H. L. Smith, assisted by Mr. T. B. Dillworth, both engineers with Electromotive Division of General Motors Corp. at La Grange, Illinois. Their subject was "The Diesel Locomotive." The presentation, illustrated by color slides, covered the engineering design and the economical advantage of the Diesel Locomotive. The speaker also discussed maintenance and service problems of this type of equipment and available sizes for railroad and industrial plant applications. There are at least three units in service in local industrial plants. It was an interesting talk, well presented.

IRWIN R. LIETZKE, *Secretary-Treasurer*

FROM N.S.P.E. LEGISLATIVE BULLETIN Defense Production Act

The Senate Banking and Currency Committee opened hearings on March 4, 1952, on the Defense Production Act and the Housing and Rent Act of 1952. If passed, S. 2594 will extend for one year authority for price, wage, rent and credit controls. Informed observers agree that controls will be extended substantially as they now exist; there promises, however, to be considerable conflict over some of the details of the program.

S. 2594 specifically does four things: 1) extends the life of the Small Defense Plants Administration; 2) extends the rest of the Defense Production Act, as amended; 3) extends veterans' rights for the purchase and rental of housing; and 4) extends the general rent provisions for one year. While individual engineers may

be affected by any one of the foregoing extensions, the extension of the Defense Production Act is perhaps of the most immediate interest to the profession generally, since it is under Title IV of this Act that salary and wage controls are established.

For quite some time it has become obvious that many professional engineers working in the consulting field, either as principals or employees, have been seriously handicapped by established controls. NSPE has been invited to testify on this subject before the Senate Banking and Currency Committee, and Executive Director Robbins expects to present the Society's views at an early date.

The Defense Production Act currently exempts from controls two classes of professionals; one, lawyers employed in the practice of law by a lawyer or firm of lawyers similarly engaged, and two, physicians in the employ of hospitals, clinics, and similar medical institutions. NSPE's basic position is that professional engineers, professionally employed, are entitled to, and should have, legislation establishing the engineer on par with his fellow professionals. The Society continues to stress the necessity of using licensure as the soundest basis for identifying professional engineers when legislation is written.

Since a similar problem confronts the architects, the American Institute of Architects is presenting to the Committee on Banking and Currency testimony similar to NSPE's. AIA and NSPE have joined together in suggesting the following amendment to the defense Production Act:

Title IV

PRICE AND WAGE STABILIZATION

Section 402

- (e) The authority conferred by this title (to control wages and salaries) shall not be exercised with respect to the following:
- (ii) . . . ; wages, salary and other compensation paid to professional engineers or professional architects licensed to practice their respective professions when employed in a professional capacity by an architect, engineer, firm of architects, or firm of engineers engaged in the practice of professional architecture or professional engineering.

Changes in Salary Stabilization Board Rulings

In the past month the Salary Stabilization Board has amended and changed some of its existing regulations. A report is no longer required for salary increases coming within the 10 per cent catch-up formula, nor is a report required for cost-of-living increases provided under salary plans. Employers are required, however, to keep current on a quarterly basis a running summary statement of all adjustments made. (GSSR Regulation 1 and 3; Gen. Sal. Order 6.)

In case of doubt, an employer may now ask the Wage-hour Division whether an employee comes under the jurisdiction of the Wage or Salary Stabilization Board. Decisions will be made only on the basis of facts furnished by the employer. (SSB Release No. 45.)

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supervisors have been authorized compensation for hours worked over and above those of the regular work week. This permission has now been extended to other workers whose duties are so closely related to the already expected groups that it is necessary to pay them additional money to prevent inequity. Prior SSB approval is not necessary if a pre-freeze plan exists, or if payment is made at a straight time rate. (General Salary Order No. 10.)

Although not as yet applicable to employees under the jurisdiction of SSB, a new Wage Stabilization Board Order amending pension and profit sharing plans will doubtless be reflected in later SSB orders. Under the WSB regulation a profit-sharing plan may be put into effect without prior Board approval where the plan provides for payment of benefits upon severance provided 1) payments do not begin until the employee has been covered for 10 years and 2) the payments are spread over at least a 10-year period. In case employment ceases because of total disability or retirement at age 65 only the 10-year spread in payment of benefits is required. (GWR No. 21.)

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FROM WASHINGTON

The story of the creation of the world is told in 400 words. The Ten Commandments in 297 words. The Declaration of Independence in 1321 words. But the Office of Price Stabilization used 2500 words to announce the reduction in the price of cabbage seed.

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OVER THE MANAGER'S DESK

This scramble for engineering and technical help which is with us today has created a demand for manpower which is far beyond the supply of those available. As a result, it offers employers the opportunity to strengthen their organizations by utilizing their present staff to better advantage or to find more capable and experienced men for key positions such as Chief Engineer, Director of Research, Plant Superintendent, Factory Manager, or Vice President in Charge of Manufacturing and Engineering. It offers the trained engineer or technical specialist the opportunity of broadening and advancing his responsibility and scope of usefulness. We have good men available for key positions to help strengthen your organization and we also have some good key positions open to help the individual advance. Why not discuss your problem with us? Perhaps we can assist you either as an employer or as an employee. We will welcome the opportunity to be of Service to you. B.H.A.

MEN AVAILABLE

Consultant, E.E., 44. Four yrs. Building Code Eng. Analysis of building laws, presentation of data to support changes in laws and acceptance of new materials. Two yrs. Industrial Analyst. Analysis and comparison of building laws and the development of programs aimed at the modernization of such laws. Nine yrs. Executive Director. Responsible to Board of Directors for the development of a comprehensive citizens housing program, including supervision of inspections. Four yrs. Field worker. Housing inspections, research, supervision of government project, and cooperation with public inspection services. \$8400. U. S. 308PE

Factory Supt., 42. One yr. plant superintendent. All phases for a scales mfr. Six yrs. Ind. Eng. Supervise and set-up industrial engineering, time study, cost control and processing, methods, estimating, and production trouble shooting, tooling, experimental work, cost and production control and product development. Five yrs. Consulting Eng. doing processing and design. \$12,000. U. S. and Foreign. 309PE

Factory Manager, Met. Eng., 36. Fifteen yrs. in charge of employing, and releasing for dept., initiating program of development and fab. in the Metals Ind., plan and carry out the plan for initiating new products into development to expand the co. into new metals industries. In charge of department for development in the field of metals, de-

veloping new and cheaper methods of processing, photography and reproductions. \$9,000. U. S. 310PE

Supt. of Forge Shop, 55. Sixteen yrs. Hamersmith General Forging on 5000-lb. hammer, General foreman. Two yrs. Supt. of forge, both light and heavy forge shops and layout of equipment. \$7500. East and West. 311PE

Chief Engineer, 39. Seven and one-half yrs. Engineering Consultant. Work with manufacturers of military type aircraft on fastening problems current to high speed aircraft. Four yrs. Liaison Engineer. Supervisor of development shop and laboratory, developing power operated machine gun and cannon turrets. Two yrs. Salesman. Outside sales work, selling to wholesale outlets, industrial accounts, interior decorators and individuals. Four yrs. Lab. Technician. Responsible for the chemical analysis of ferrous and non-ferrous metals and plating solutions. \$8,000. U. S. 312PE

Construction Supt. 35. Five mos. asst. Supt. Coordinated all mechanical trades in construction, redesigned mechanical installations to suit job. Three yrs. Concrete construction. Residential, commercial, industry, small home construction. One yr. Mech. Eng. Design heating, vent., plumbing, hospitals, industrial bldgs. Four yrs. designing R.R., highway, airfields, power plants. \$9100. South and West. 313PE

POSITIONS AVAILABLE

Resident Engineer, Grad. C.E. or arch. Age: up to 50. 10 yrs. experience heavy industrial and municipal experience. Duties: supervising projects of all types such as roads, sewers, waterworks, industrial building work, etc. Must have good personality—able to oversee complete project. Location: Northern part of country. Salary: \$10,000 to \$12,000 per year. Employer will negotiate the fee. Headquarters: Chicago. R-8680

Maintenance Engineer. Responsible for assisting on matters pertaining to physical operations, maintenance, alteration, improvements, service, etc., on mechanical and electrical installations and equipment on low rent and war emergency housing projects. Visit projects and make inspection of physical equipment, roads, utilities, etc. Give technical advice on operations and maintenance. Complete reports on inspections and make recommendations. Recommend approval of contracts. Prepare plans and specifications for repairs and replacements, etc. Salary: up to \$6940. Location: Chicago. R-8684(b)

Designer—Research-Machine. Grad. M.E. 5 yrs. experience in automatic mechanism design and manufacturing procedures and demonstrated ability scientific and engineering research. Duties: Act as technical advisor on projects and to handle specific problems in his special field. Able to assume responsibility for outlining scientific approach to research programs. Should be an authority in his specific field. Fields of interest are: aeronautical engineering, aerodynamics, automatic control, heat transfer, machine design hydraulic machinery, jet propulsion, servo-mechanisms, etc. Industrial research. Salary: Open. Location: Chicago. R-8685(e)

Project Engineer. Grad. Eng. Age: to 45. 5 yrs. experience as development or project eng. with electronic and aircraft instrument company. Locate and recommend sources suitable for engineering development work. Complete negotiations for subcontracting approved development project, administer subcontract so capacities of development company, or lab. are utilized to fullest extent. Review and concur with engineering specifications of potential development in order to affect most advantageous subcontracting agreement possible. Review with responsible project engineers all proposed developments. Supervise and train personnel. Personality to meet high level engineering and management personnel. Salary: up to \$10,500. Location: Michigan. T-8689

Sales Engineers, Grad. C. E. or Arch. Age: up to 45. Contact architects, engineers contractors and building supply concerns. Sale and promotional work for manufacturer of building material products. Conduct meetings with distributors, personal contact and general service work. Territories: Atlanta, Cleveland, New York and Chicago. Travel 50% of time. Salary: \$6000 and up. R-8694

Designer, M.E. Age: up to 40. 2 plus yrs. experience designing tools, jigs and fixtures for small mechanical devices. Some board work, but mostly design. Salary: \$125-\$150 per week. Employer will pay the fee. Location: Chicago. R-8695

Project Engineer, B.S. Mech. Engrg. Age: 25-35. 0-4 yrs. experience general-materials drafting. Knowledge: Canning fruits and vegetables. Duties: Depending on experience take over a project or portion and follow through on it from start to finish. Canning peas and corn. Salary: \$3900-\$6600 depending on experience. Company will negotiate fee. Location: Minnesota. T-8700